

[Cost-effective Energy Conservation System]

Abstract

A cost-effective, passive system for conserving energy during hot, summer months is presented. Earlier inventions in this area such as the attic fan (US Patent No. 2,746,674) worked by forcing the hot attic air out whenever the attic air temperature reached a pre-determined level. The present invention works differently; by preventing heat buildup within the attic. A simple, mechanical system is designed to cover a large portion of the roof with a cloth like synthetic material that has a smooth, light-colored, reflective surface reflecting most of the incident solar energy during the months when the weather is hot. An air gap between this reflective surface and the roof further insulates the roof from the solar heat. This prevents build up of the super heated air in the attic thereby lowering the energy bills to cool the house and conserving energy. During the cooler months, this reflective surface covering the roof is fully or partially retracted as needed.